SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier
Trade name/designation: Epi proColon PCR Mix
Article no. (user): Epi proColon Sensitive PCR Kit (M5-02-002)

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses
remark
Epi proColon Sensitive PCR Kit (M5-02-002)

Product categories [PC]
PC21 Laboratory chemicals

Process categories [PROC]
PROC15 Use as laboratory reagent

1.3 Details of the supplier of the safety data sheet
Importer/Only Representative
Epigenomics AG
Geneststrasse 5
D-10829 Berlin
P.O. Box: ---
Telephone: +49 (0)30 24345-0 (9:00 - 16:30)
Telefax: +49 (0)30 24345-555
E-mail: contact@epigenomics.com
www.epigenomics.com

1.4 Emergency telephone number
Giftnotruf Berlin: +49 (0)30 30686-700 (24h)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008 [CLP]
remark
This mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

2.2 Label elements

2.3 Other hazards
No data available

SECTION 3: Composition / information on ingredients

remark
Full text of R-, H- and EUH-phrases: see section 16.
3.1/3.2 Substances/Mixtures

Hazardous ingredients

2-Amino-2-hydroxymethyl-propane-1,3-diol  \( <1\% \)
CAS 77-86-1
EC 201-064-4
Skin Irrit. 2, H315 / Eye Irrit. 2, H319 / STOT SE 3, H335

SECTION 4: First aid measures

4.1 Description of first aid measures

General information
Change contaminated, saturated clothing.

Following inhalation
Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. In case of respiratory tract irritation, consult a physician.

Following skin contact
After contact with skin, wash immediately with plenty of water and soap. In case of skin irritation, consult a physician.

After eye contact
In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

After ingestion
Rinse mouth immediately and drink plenty of water.

4.2 Most important symptoms and effects, both acute and delayed
No data available

4.3 Indication of any immediate medical attention and special treatment needed
Notes for the doctor
Treat symptomatically.

SECTION 5: Firefighting measures

Additional information
The product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings.

5.1 Extinguishing media

Suitable extinguishing media
Carbon dioxide (CO2)
Extinguishing powder
Water spray
alcohol resistant foam

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products
Nitrogen oxides (NOx)
Carbon monoxide
Carbon dioxide (CO2)
Hydrogen chloride (HCl)

5.3 Advice for firefighters

Special protective equipment for firefighters:
In case of fire: Wear self-contained breathing apparatus. protective clothing.
SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

**Emergency procedures**
Remove persons to safety. Provide adequate ventilation.

**Personal precautions**
Avoid dust formation. Use personal protection equipment.

**Protective equipment**
Wear breathing apparatus if exposed to vapours/dusts/aerosols.

For emergency responders

**Personal protection equipment**
Wear breathing apparatus if exposed to vapours/dusts/aerosols.

6.2 Environmental precautions
Suppress gases/vapours/mists with water spray jet. Do not allow to enter into surface water or drains.

6.3 Methods and material for containment and cleaning up

For containment

**Suitable material for taking up:**
Absorbing material, organic

For cleaning up

**Suitable material for diluting or neutralizing:**
Water

6.4 Reference to other sections
Safe handling: see section 7
Disposal: see section 13
Personal protection equipment: see section 8

SECTION 7: Handling and storage

7.1 Precautions for safe handling

**Advices on general occupational hygiene**
Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500. When using do not eat, drink, smoke, sniff. Remove contaminated, saturated clothing. Avoid contact with skin, eyes and clothes.

**Protective measures**

**Advices on safe handling**
Avoid:
- Inhalation of vapours or spray/mists
- Skin contact
- Eye contact

**Measures to prevent fire**
The product is not:
- Combustible
- Explosive
No special fire protection measures are necessary.
Environmental precautions
See section 8.

7.2 Conditions for safe storage, including any incompatibilities
Requirements for storage rooms and vessels
Keep/Store only in original container. Keep container tightly closed.

Hints on joint storage
Storage class
Non-combustible liquids

Further information on storage conditions
storage temperature -25 -15 °C

7.3 Specific end use(s)
Recommendation
Observe instructions for use.

SECTION 8: Exposure controls/personal protection

Additional information
Preventive industrial medical examinations are to be offered.

8.1 Control parameters

remark
Does not contain substances above concentration limits fixing an occupational exposure limit.

8.2 Exposure controls

Appropriate engineering controls
Technical measures to prevent exposure
refer to chapter 7. No further action is necessary.

Personal protection equipment

Eye/face protection
Suitable eye protection:
Eye glasses with side protection

Skin protection

Suitable gloves type:
Disposable gloves

Suitable material:
NR (natural rubber, natural latex)
NBR (Nitrile rubber)

Required properties:
liquid-tight

additional hand protection measures
Check leak tightness/impermeability prior to use.

remark
Breakthrough times and swelling properties of the material must be taken into consideration. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.
Body protection:

Suitable protective clothing:
lab coat

Recommended material:
Natural fibres (e.g. cotton)

Respiratory protection
Respiratory protection necessary at:
prolonged exposure
aerosol or mist formation

Suitable respiratory protection apparatus:
Full-/half-/quarter-face masks (DIN EN 136/140)
ABEK-P1

remark
Usually no personal respirative protection necessary.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance
Physical state
liquid

Colour
colourless

<table>
<thead>
<tr>
<th>parameter</th>
<th>Method - source - remark</th>
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<tr>
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<tr>
<td>Flash point (°C)</td>
<td>No flash point according to standard method.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>not determined</td>
</tr>
<tr>
<td>flammability</td>
<td>not determined</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>not determined</td>
</tr>
<tr>
<td>lower explosion limit</td>
<td>not determined</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>not determined</td>
</tr>
<tr>
<td>Vapour density</td>
<td>not determined</td>
</tr>
<tr>
<td>Density</td>
<td>not determined</td>
</tr>
<tr>
<td>Fat solubility (g/L)</td>
<td>not determined</td>
</tr>
<tr>
<td>Water solubility (g/L)</td>
<td>completely miscible</td>
</tr>
<tr>
<td>Soluble (g/L) in</td>
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</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>not determined</td>
</tr>
</tbody>
</table>
### SECTION 10: Stability and reactivity

#### 10.1 Reactivity
No information available.

#### 10.2 Chemical stability
The product is stable under storage at normal ambient temperatures.

#### 10.3 Possibility of hazardous reactions
No information available.

#### 10.4 Conditions to avoid
No information available.

#### 10.5 Incompatible materials
**Materials to avoid**
- Alkali (lye)
- Oxidising agent

#### 10.6 Hazardous decomposition products
Does not decompose when used for intended uses.

### SECTION 11: Toxicological information

#### 11.1 Information on toxicological effects

**Acute toxicity**

**Acute oral toxicity**
- **ingredient**: 2-Amino-2-hydroxymethyl-propane-1,3-diol
- **Acute oral toxicity**: 5900 mg/kg

**Effective dose**
- LD50:
- **Species**: Rat

**Skin corrosion/irritation**
- **Assessment/classification**: slightly irritant but not relevant for classification.

**Eye damage/irritation**
- **In vitro eye test**: Irritating to eyes.

**CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

**Overall Assessment on CMR properties**
This substance does not meet the criteria for classification as CMR category 1A or 1B according to CLP.
STOT-single exposure

STOT SE 3

exposure route
inhalative

Assessment/classification
May cause respiratory irritation.

STOT SE 3

Irritation to respiratory tract

Assessment/classification
May cause respiratory irritation.

SECTION 12: Ecological information

12.1 Toxicity
No information available.

12.2 Persistence and degradability
No information available.

12.3 Bioaccumulative potential
No information available.

12.4 Mobility in soil
No information available.

12.5 Results of PBT and vPvB assessment
The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6 Other adverse effects
No information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Appropriate disposal / Product
Waste disposal according to official state regulations.

Appropriate disposal / Package
Completely emptied packings can be re-cycled. Handle contaminated packaging in the same way as the substance itself.

SECTION 14: Transport information

<table>
<thead>
<tr>
<th></th>
<th>Land transport (ADR/RID)</th>
<th>Sea transport (IMDG)</th>
<th>Air transport (ICAO-TI / IATA-DGR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.1 UN-No.</td>
<td>not applicable</td>
<td>not applicable</td>
<td>not applicable</td>
</tr>
<tr>
<td>14.2 Proper Shipping Name</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>14.3 Class(es)</td>
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<td></td>
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</tr>
<tr>
<td>14.4 Packing group</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>14.5 ENVIRONMENTALLY HAZARDOUS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.6 Special precautions for user</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Additional information
All transport carriers
Not a hazardous material with respect to transportation regulations.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
National regulations

15.2 Chemical Safety Assessment
For this substance a chemical safety assessment is not required.

SECTION 16: Other information

Abbreviations and acronyms
For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

Relevant R-, H- and EUH-phrases (Number and full text)
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
R36/37/38 Irritating to eyes, respiratory system and skin.

Key literature references and sources for data
The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.
SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier
Trade name/designation: Epi proColon Polymerase
Article no. (user): Epi proColon Sensitive PCR Kit (M5-02-002)

Other means of identification
SDS 0022

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses
remark
Epi proColon Sensitive PCR Kit (M5-02-002)

Product categories [PC]
PC21 Laboratory chemicals

Process categories [PROC]
PROC15 Use as laboratory reagent

1.3 Details of the supplier of the safety data sheet

Importer/Only Representative
Epigenomics AG
Geneststrasse 5
D-10829 Berlin
P.O. Box: ---
Telephone: +49 (0)30 24345-0 (9:00 - 16:30)
Telefax: +49 (0)30 24345-555
E-mail: contact@epigenomics.com
www.epigenomics.com

1.4 Emergency telephone number
Giftnotruf Berlin: +49 (0)30 30686-700 (24h)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]
remark
This mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

2.2 Label elements
2.3 Other hazards
No data available

SECTION 3: Composition / information on ingredients

3.1/3.2 Substances/Mixtures
No data available

Hazardous ingredients
SECTION 4: First aid measures

4.1 Description of first aid measures

General information
Change contaminated, saturated clothing.

Following inhalation
Provide fresh air.

Following skin contact
After contact with skin, wash immediately with plenty of water and soap.

After eye contact
In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart.

After ingestion
Rinse mouth immediately and drink plenty of water.

4.2 Most important symptoms and effects, both acute and delayed
No data available

4.3 Indication of any immediate medical attention and special treatment needed

Notes for the doctor
Treat symptomatically.

SECTION 5: Firefighting measures

Additional information
The product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings.

5.1 Extinguishing media
No data available

5.2 Special hazards arising from the substance or mixture
No data available

5.3 Advice for firefighters

Special protective equipment for firefighters:
protective clothing. In case of fire: Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Personal precautions
Use personal protection equipment.

6.2 Environmental precautions
No special environmental measures are necessary.

6.3 Methods and material for containment and cleaning up

For containment

Suitable material for taking up:
Absorbing material, organic
For cleaning up

Suitable material for diluting or neutralizing:
Water

6.4 Reference to other sections
Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advises on general occupational hygiene
Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500. When using do not eat, drink, smoke, sniff. Remove contaminated, saturated clothing. Avoid contact with skin, eyes and clothes.

Protective measures
Advises on safe handling
Avoid:
Inhalation of vapours or spray/mists
Skin contact
Eye contact

Measures to prevent fire
The product is not:
Combustible
Explosive
No special fire protection measures are necessary.

Environmental precautions
See section 8.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels
Keep/Store only in original container. Keep container tightly closed.

Hints on joint storage
Storage class
Non-combustible liquids

Further information on storage conditions
storage temperature  -25 - -15 °C

7.3 Specific end use(s)

Recommendation
Observe instructions for use.

SECTION 8: Exposure controls/personal protection

Additional information
Preventive industrial medical examinations are to be offered.
8.1 Control parameters

remark
Does not contain substances above concentration limits fixing an occupational exposure limit.

8.2 Exposure controls

Appropriate engineering controls

Technical measures to prevent exposure
refer to chapter 7. No further action is necessary.

Personal protection equipment

Eye/face protection

remark
Eye protection: not required.

Skin protection

Suitable gloves type:
Disposable gloves

Required properties:
liquid-tight

Body protection:
Suitable protective clothing:
lab coat

Respiratory protection

remark
Usually no personal respiratory protection necessary.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance
Physical state
liquid

Colour
colourless

Odour
odourless

Odour threshold:
odourless

<table>
<thead>
<tr>
<th>parameter</th>
<th>Method - source - remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>not determined</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>not determined</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>not determined</td>
</tr>
<tr>
<td>Flash point (°C)</td>
<td>No flash point according to standard method.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>not determined</td>
</tr>
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<td>parameter</td>
<td>Method - source - remark</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>flammability</td>
<td>not determined</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>not determined</td>
</tr>
<tr>
<td>lower explosion limit</td>
<td>not determined</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>not determined</td>
</tr>
<tr>
<td>Vapour density</td>
<td>not determined</td>
</tr>
<tr>
<td>Density</td>
<td>not determined</td>
</tr>
<tr>
<td>Fat solubility (g/L)</td>
<td>Immiscible</td>
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<tr>
<td>Water solubility (g/L)</td>
<td>completely miscible</td>
</tr>
<tr>
<td>Soluble (g/L) in</td>
<td>not determined</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>not determined</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>not determined</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>not determined</td>
</tr>
</tbody>
</table>

9.2 Other safety information

Physical hazards

Flammable solids

Assessment/classification
Non-flammable.

SECTION 10: Stability and reactivity

10.1 Reactivity
No information available.

10.2 Chemical stability
The product is stable under storage at normal ambient temperatures.

10.3 Possibility of hazardous reactions
No hazardous reaction when handled and stored according to provisions.

10.4 Conditions to avoid
No information available.

10.5 Incompatible materials
No information available.

10.6 Hazardous decomposition products
No information available.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

skin corrosion/irritation

Assessment/classification
slightly irritant but not relevant for classification.
CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Overall Assessment on CMR properties
Due to missing data no statement can be made whether the substance fullfills the criteria of CMR categories 1 or 2.

STOT-single exposure

STOT SE 3
Irritation to respiratory tract

Assessment/classification
May cause respiratory irritation.

SECTION 12: Ecological information

12.1 Toxicity
No information available.

12.2 Persistence and degradability
No information available.

12.3 Bioaccumulative potential
No information available.

12.4 Mobility in soil
No information available.

12.5 Results of PBT and vPvB assessment
This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

12.6 Other adverse effects
No information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Appropriate disposal / Product
Waste disposal according to official state regulations.

Appropriate disposal / Package
Handle contaminated packaging in the same way as the substance itself.

SECTION 14: Transport information

<table>
<thead>
<tr>
<th>Land transport (ADR/RID)</th>
<th>Sea transport (IMDG)</th>
<th>Air transport (ICAO-TI / IATA-DGR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>not applicable</td>
<td>not applicable</td>
<td>not applicable</td>
</tr>
</tbody>
</table>

14.1 UN-No.
14.2 Proper Shipping Name
14.3 Class(es)
14.4 Packing group
14.5 ENVIRONMENTALLY HAZARDOUS
14.6 Special precautions for user
Land transport (ADR/RID)  Sea transport (IMDG)  Air transport (ICAO-TI / IATA-DGR)

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Additional information

All transport carriers
Not a hazardous material with respect to transportation regulations.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations

15.2 Chemical Safety Assessment
For this substance a chemical safety assessment is not required.

SECTION 16: Other information

Abbreviations and acronyms
For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

Key literature references and sources for data
The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.